

## **IN THE CLAIMS:**

A complete listing of the claims is set forth below and amendments are made to the claims relative the response to the amendment filed on 15 July 2009. Please amend the claims as follows:

1. **(Currently Amended)** A computer-implemented system for categorizing product data in an electronic commerce transaction, the system comprising:

a global content directory server coupled with one or more seller databases over a network, the global content directory server comprising:

a storage medium stored therein a data association module configured to:

access a first product classification schema, the first schema comprising:

a taxonomy comprising a hierarchy of classes categorizing one or more products; and

ontologies associated with one or more of the classes, each ontology comprising one or more product attributes, wherein each of the one or more products is associated with a global unique identifier;

access target data associated with the first schema, the target data organized according to a second product classification schema;

determine one or more classes of the first schema with which at least a portion of the target data is associated based on a comparison between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises using statistical correlation techniques to identify portions of the target data including values that correspond to values for a product attribute included in the ontologies of these one or more classes of the first schema;

associate the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the comparison, the one or more classes of the first schema with which the at least a portion of the target data is associated; and

store the values for one or more of the product attributes of the ontologies of the first schema with which the target data is compared in the one or more seller databases.

2. **(Currently Amended)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data including the name or an equivalent name of a product attribute included in the ontologies of these one or more classes of the first schema.

3. **(Currently Amended)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data including values that match or are similar to values for a product attribute included in the ontologies of these one or more classes of the first schema.

4. **(Currently Amended)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data including a range of values that matches or is similar to a range of values for a product attribute included in the ontologies of these one or more classes of the first schema.

5. **(Currently Amended)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data including symbols that match or are similar to symbols associated with values for a product attribute included in the ontologies of these one or more classes of the first schema.

6. **(Currently Amended)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data having formatting that matches or is similar to formatting of values for a product attribute included in the ontologies of these one or more classes of the first schema.

7. **(Currently Amended)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises using vector space analysis to identify multiple portions of the target data including values that correspond to values for multiple product attributes included in the ontologies of these one or more classes of the first schema.

8. **(Canceled)**

9. **(Previously Presented)** The system of Claim 1, wherein the values in the seller databases identified by one or more pointers associated with one or more classes of the first schema.

10. **(Previously Presented)** The system of Claim 1, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to the target data with the one or more classes of the first schema.

11. **(Previously Presented)** The system of Claim 1, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to specific portions of the target data with one or more product attributes included in the ontology of the one or more classes of the first schema.

12. **(Currently Amended)** A computer-implemented method for categorizing product data in an electronic commerce transaction, the method comprising:

accessing, by a global content directory server, a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes categorizing one or more products, the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes, wherein each of the one or more products is associated with a global unique identifier;

accessing, by the server, target data [[to be]] associated with the first schema, the target data organized according to a second product classification schema;

determining, by the server, one or more classes of the first schema with which at least a portion of the target data is associated based on a comparison between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises using statistical correlation techniques to identify portions of the target data including values that correspond to values for a product attribute included in the ontologies of these one or more classes of the first schema;

associating, by the server, the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the comparison, the one or more classes of the first schema with which the at least a portion of the target data is associated; and

storing, by the server, the values for one or more of the product attributes of the ontologies of the first schema with which the target data is compared in one or more seller databases.

13. **(Currently Amended)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data including the name or an equivalent name of a product attribute included in the ontologies of these one or more classes of the first schema.

14. **(Currently Amended)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data including values that match or are similar to values for a product attribute included in the ontologies of these one or more classes of the first schema.

15. **(Currently Amended)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data including a range of values that matches or is similar to a range of values for a product attribute included in the ontologies of these one or more classes of the first schema.

16. **(Currently Amended)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data including symbols that match or are similar to symbols associated with values for a product attribute included in the ontologies of these one or more classes of the first schema.

17. **(Currently Amended)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data having formatting that matches or is similar to formatting of values for a product attribute included in the ontologies of these one or more classes of the first schema.

18. **(Currently Amended)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises using vector space analysis to identify multiple portions of the target data including values that correspond to values for multiple product attributes included in the ontologies of these one or more classes of the first schema.

19. **(Canceled)**

20. **(Previously Presented)** The method of Claim 12, wherein the values in the seller databases identified by one or more pointers associated with one or more classes of the first schema.

21. **(Previously Presented)** The method of Claim 12, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to the target data with the one or more classes of the first schema

22. **(Previously Presented)** The method of Claim 12, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to specific portions of the target data with one or more product attributes included in the ontology of the one or more classes of the first schema.

23. **(Currently Amended)** Software for categorizing product data in an electronic commerce transaction, the software embodied in a computer-readable storage medium and when executed using one or more computers is configured to:

access a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes categorizing one or more products, the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes, wherein each of the one or more products is associated with a global unique identifier and provided by a global content directory server;

access target data [[to be]] associated with the first schema, the target data organized according to a second product classification schema;

determine one or more classes of the first schema with which at least a portion of the target data is associated based on a comparison between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises using statistical correlation techniques to identify portions of the target data including values that correspond to values for a product attribute included in the ontologies of these one or more classes of the first schema;

associate the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the comparison, the one or more classes of the first schema with which the at least a portion of the target data is associated; and

store the values for one or more of the product attributes of the ontologies of the first schema with which the target data is compared in one or more seller databases.

24. **(Currently Amended)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data including the name or an equivalent name of a product attribute included in the ontologies of these one or more classes of the first schema.

25. **(Currently Amended)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data including values that match or are similar to values for a product attribute included in the ontologies of these one or more classes of the first schema.

26. **(Currently Amended)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data including a range of values that matches or is similar to a range of values for a product attribute included in the ontologies of these one or more classes of the first schema.

27. **(Currently Amended)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data including symbols that match or are similar to symbols associated with values for a product attribute included in the ontologies of these one or more classes of the first schema.

28. **(Currently Amended)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises identifying a portion of the target data having formatting that matches or is similar to formatting of values for a product attribute included in the ontologies of these one or more classes of the first schema.



29. **(Currently Amended)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated further comprises using vector space analysis to identify multiple portions of the target data including values that correspond to values for multiple product attributes included in the ontologies of these one or more classes of the first schema.

30. **(Canceled)**

31. **(Previously Presented)** The software of Claim 23, wherein the values in the seller databases identified by one or more pointers associated with one or more classes of the first schema.

32. **(Previously Presented)** The software of Claim 23, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to the target data with the one or more classes of the first schema

33. **(Previously Presented)** The software of Claim 23, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to specific portions of the target data with one or more product attributes included in the ontology of the one or more classes of the first schema.

34. **(Canceled)**

35. **(Currently Amended)** A computer-implemented system for categorizing product data in an electronic commerce transaction, the system comprising:

a global content directory server coupled with one or more seller databases over a network, the global content directory server comprising:

a storage medium stored therein a data association module configured to:

access a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes categorizing one or more products, the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes, wherein each of the one or more products is associated with a global unique identifier;

access target data [[to be]] associated with the first schema, the target data organized according to a second product classification schema;

determine one or more classes of the first schema with which at least a portion of the target data is associated based on a comparison between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises using statistical correlation techniques to identify portions of the target data including values that correspond to values for a product attribute included in the ontologies of these one or more classes of the first schema;

associate the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data is associated, the target data associated with the classes of the first schema using one or more pointers to the target data; and

store the values for one or more of the product attributes of the ontologies of the first schema with which the target data is compared in the one or more seller databases.

36. **(Currently Amended)** A computer-implemented method for categorizing product data in an electronic commerce transaction, the method comprising:

accessing, by a global content directory server, a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes categorizing one or more products, the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes, wherein each of the one or more products is associated with a global unique identifier;

accessing, by the server, target data [[to be]] associated with the first schema, the target data organized according to a second product classification schema;

determining, by the server, one or more classes of the first schema with which at least a portion of the target data is associated based on a comparison between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises using statistical correlation techniques to identify portions of the target data including values that correspond to values for a product attribute included in the ontologies of these one or more classes of the first schema;

associating, by the server, the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the comparison, the one or more classes of the first schema with which the at least a portion of the target data is associated, the target data associated with the classes of the first schema using one or more pointers to the target data; and

storing, by the server, the values for one or more of the product attributes of the ontologies of the first schema with which the target data is compared in one or more seller databases.

37. **(Currently Amended)** Software for categorizing product data in an electronic commerce transaction, the software embodied in a computer-readable ~~storage medium~~ storage medium and when executed using one or more computers is configured to:

access a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes categorizing one or more products, the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes, wherein each of the one or more products is associated with a global unique identifier and provided by a global content directory server;

access target data [[to be]] associated with the first schema, the target data organized according to a second product classification schema;

determine one or more classes of the first schema with which at least a portion of the target data is associated based on a comparison between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises using statistical correlation techniques to identify portions of the target data including values that correspond to values for a product attribute included in the ontologies of these one or more classes of the first schema;

associate the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the comparison, the one or more classes of the first schema with which at least a portion of the target data is associated, the target data associated with the classes of the first schema using one or more pointers to the target data; and

store the values for one or more of the product attributes of the ontologies of the first schema with which the target data is compared in one or more seller databases.